REMARKS

Claims 1-8 are pending and under consideration.

On pages 2 and 3 of the Office Action, claims 1, 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Masuda (U.S. Patent 6,931,025) in view of Aziz (U.S. Patent 6,091,820). In addition, on pages 3 and 4 of the Office Action, claims 2-4, 7 and 8 were rejected under 35 U.S.C. § 103(a) in view of Masuda, Aziz, and Ho et al., (U.S. Patent Publication 2003/0133461). All rejections are traversed and reconsideration is respectfully requested.

Masuda is directed to "[a]n optical network with an optical adaptation layer whose order is higher than synchronous optical network (SONET) layer and lower than Internet protocol (IP) layer" (Abstract, lines 1-3). In rejecting claims 1-8, the Office Action relied on item 3a in FIG. 4 of Masuda as teaching "forming collective Internet Protocol data packets, each containing several Internet Protocol data packets of different communication data streams" (*e.g.* claim 1, lines 4-5) as recited in the claims. The Office Action does not describe how item 3a of FIG. 4 teaches or suggests the quoted limitation of the claims. Therefore, Applicants will put item 3a of FIG. 4 in the proper context. Masuda states that

> shown in FIG. 3, at each node, **optical adaptation (optical ADP) layer** 2b as an **intermediate layer** is laid **between IP layer** 2a as **layer 3** and **SONET** (synchronous optical network) layer 2c as **layer 2**. Optical edge node EN terminates IP packet 2e from subscriber network la, grouping the separate IP packet 2e at optical ADP layer 2b, constructing the optical adaptation frame. In constructing the optical adaptation frame, the QOS processing or transfer determination processing in the network can be simplified by aggregating into destination network node (egress node to exit from the network to the destination user network) and QOS (for delay-oriented and best-effort).

(column 4, lines 7-19, emphasis added). Thus, the optical ADP layer (2b in FIG. 3 of Masuda) is situated between the IP layer and the SONET layer. In addition, Masuda uses the Open Systems Interconnect (OSI) Reference Model, developed by the International Organization of Standards in reference to FIG. 3. The OSI Reference Model is described as "the only internationally accepted framework of standards for communications between different systems made by different vendors" (Newton's Telecom Dictionary, 20th Edition, see exhibit A attached hereto). As noted in Masuda, the IP layer is in layer 3 of the OSI Reference Model, where layer 3 is described as the Network Layer and "determines how data is transferred between computers ... [it] also addresses routing within and between individual networks" (*ibid.*). In contrast, SONET is described by Masuda as being in layer 2 of the OSI Reference Model, where

layer 2 is the Data Link layer and "concerned with procedures and protocols for operating the communication lines" (*ibid.*).

In the embodiment of Masuda discussed above, one skilled in the art would understand that because optical ADP layer 2b is "an intermediate layer ... laid between IP layer 2a as layer 3 and SONET ... layer 2c as layer 2" of the OSI Reference Model, the optical ADP layer is separate from layers 2 and 3. Thus, one skilled in the art would view the optical ADP layer as an addition to the layers contemplated by the OSI Reference Model. Thus, the optical ADP layer taught by Masuda is not a part of either layer 2 or 3 of the OSI Reference Model.

With respect to FIG. 4, Masuda teaches "at an edge node of optical network, IP packets 3f directed to a same destination are grouped, and a optical ADP frame 3a to which the respective packets are aggregated is constructed" (column 4, line 65 to column 5, line 1, grammar errors in original). Thus, FIG. 4 of Masuda shows that IP packets, residing in layer 3 of the OSI Reference Model, are passed to the optical ADP layer and aggregated, then these aggregated optical frames are passed on to layer 2 of the OSI Reference Model.

In contrast, the claims clearly recite "forming collective Internet Protocol data packets, each containing several Internet Protocol data packets of different communication data streams" (*e.g.* claim 1, lines 4-5). Reading the plain language of the claims, it is clear that each Internet Protocol data packet contains "several Internet Protocol data packets of different communication data streams" and not an "optical ADP frame 3a [in]to which the respective [IP] packets are aggregated" as taught by Masuda. In addition, one of ordinary skill in the art would understand that Masuda teaches away from the features of the present application because Masuda teaches an intermediate layer situated between layers 2 and 3 of the OSI Reference Model and the claims are directed to "forming collective Internet Protocol data packets". If the same operations were performed by a system like that disclosed by Masuda, the operations would be performed in layer 3 of the OSI Reference Model, not the optical ADP layer.

Nothing has been cited in either Aziz or Ho et al. that teaches or suggests what Masuda failed to teach. Therefore, it is submitted that Masuda, Aziz, and Ho et al., individually or in combination, do not teach all the features recited in the claims and that claims 1-8 are patentably distinguishable over the prior art of record. Withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 8/15/07

By: David Moore

David E. Moore
Registration No. 59,047

1201 New York Avenue, NW, 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501